Main results: Intraperitoneal implantation of purified beta-cells improved the diabetic state within 8–10 days. The metabolic parameters were stable within 4–5 weeks after islet transplantation in fifteen of twenty-one recipients (71.4%). Stimulation with PHA at 21 days post beta- cells grafts produced a marked increase in ^{3}H-Thymidine incorporation in lamina propria and Peyer's patches lymphoid T cells.
Conclusions: (1) These results demonstrated normalization of metabolic and immunologic parameters in diabetic rats which received associated therapy (pancreatic beta-cells and *E. coli* vaccine) and (2) beta-cells stimulated the immune response to *Escherichia coli* vaccine.

Infectious outcomes after alternative donor stem cell transplantation: a retrospective cohort comparison

J. Somani, I. Redei, J. Cherry, A. Tanner, S. Lonial, V. Bartlett, K. Manion, E. Waller, A. Langston
Emory University BM and Stem Cell Transplant Center, Atlanta, GA, USA

Allogeneic stem cell transplantation from donors other than HLA-matched siblings results in a high risk of post-transplant infections because of the risk of graft-versus-host disease (GVHD) with an unmanipulated graft, or delayed immune reconstitution following T cell-depletion (TCD). We compared infectious outcomes in the first yr post-transplant (tx) in 28 consecutive recipients of stringently TCD blood hematopoeitic progenitor cell (HPC) grafts from haploidentical family donors (HD), and 28 consecutive recipients of unmanipulated grafts from matched or 1 Ag mismatched unrelated donors (URD). Included are pts (*excluding* CML-CP1) transplanted at our center between 6/98 and 12/01 after myeloablative conditioning. HD pts received pre-tx ATG, and no scheduled post-tx immunosuppression. URD pts received tacrolimus and methotrexate for GVHD prophylaxis. Median CD3+ cell dose/kg was 3.6 logs lower in the HD *vs* URD grafts ($p<0.0001$). Median age was 31y (21–56) for HD and 43y (18–51) for URD pts. 15 HD and 17 URD pts were in relapse at time of transplant. Acute and/or chronic extensive GVHD occurred in 80% of evaluable URD pts *vs* 15% of HD pts ($p<0.001$). Bacteremias were the most common infections, occurring at similar frequencies in the two groups. Polymicrobial bacteremias occurred exclusively in URD patients ($n=7$; $p=0.009$). Proven/probable invasive fungal infections (IFI) occurred in 23% of HD pts, and 12% of URD pts (p=NS). Frequency and timing of CMV reactivation (by PCR), late CMV reactivation (>d 100), and CMV *disease* were similar in the two groups. EBV-associated PTLD was unique to HD pts ($n=3$), and drug-resistant HSV disease was also more common after HD tx. Infection related deaths (censored at 1 yr) in HD pts included bacterial sepsis (3), Aspergillosis (3), parainfluenza pneumonia (2), PCP (1), other pneumonia (1), amebic encephalitis (1), toxoplasmosis (1), EBV-PTLD (1), and acalculous cholecystitis (1). Infectious deaths in URD pts resulted from IFI (3), bacterial sepsis (2), CMV pneumonia (1), aspiration pneumonia (1), and acalculous cholecystitis (1).

	Infection related	*Relapse*	*Regimen-related (toxic)*	*Unknown*
HD	n=14	n=9	n=1	n=2
URD	n=8 (p=0.1)	n=4 (p=0.1)	n=7 (p=0.02)	n=0 (p=0.09)

Infections are the most common cause of death in these pts. The trend toward higher risk of infectious death following TCD HD *vs* unmanipulated URD transplants was not statistically significant, although the spectrum of infections was different. Strategies aimed at enhancing immune reconstitution without stimulating GVHD are needed to reduce the risks of infection and relapse after stringently TCD alternative donor transplantation.

FUNGAL INFECTIONS

Invasive *Aspergillosis* in chronic lung disease

Ravinder Kaur,[1] Manish Kakkar[1] and G. R. Sethi[2]
Departments of [1]Microbiology and [2]Pediatrics, Maulana Azad Medical College, New Delhi, India

The spectrum of *Aspergillus* induced human pulmonary afflictions vary greatly from apparently harmless colonization to a fulminant and rapidly fatal disease. Invasive aspergillosis (IA) is a disease that occurs primarily in severely immunocompromised patients, clinical diagnosis in whom is often difficult and missed, adding to the severity of the outcome.
Aims and objectives: To study the occurrence of IA in cases of chronic bronchopulmonary disorders with locally and/ or systemically immunocompromised conditions and correlate the role of clinical and radiological parameters of these patients with a battery of laboratory investigations in the early diagnosis and management.
Materials and methods: Thirty-four patients of chronic bronchopulmonary disorders with suspected aspergillosis and underlying immunocompromised state were studied. Thorough clinical, hematological and radiological examinations were carried out. Sputum, bronchial aspirate/ BAL and serum samples were collected. Microscopy and culture for *Aspergillus* spp in addition to detection of specific anti-*A. fumigatus* IgG and IgE by ELISA and skin sensitivity tests against *Aspergillus* spp were performed.
Results: Out of 34 cases studied, 7 were diagnosed as IA: 2 as highly probable and 5 as probable cases. IA was found to be most common in <20 and >60 years of age